I was told that the same system prevails in Redwood City.

Recommendations.

Now that I have reviewed some of the efforts made to supply the public with adequate emergency service on Sunday and still enable the pharmacists to obtain as much rest as possible, it seems in order to suggest some general plan for adoption, with the hope that if any improvement can be made it will be forthcoming. For large cities, I advise that there be a division into sections of appropriate size, such as would be exemplified in San Francisco by North Beach, Golden Gate Valley, Richmond, Mission, Potrero, Hayes Valley, etc., and that the pharmacists in these areas arrange to keep open on Sunday afternoon and, if advisable, Sunday evening, also, in the order agreed upon, the closed stores directing the people to the establishment that is open. Such co-operation for the safety of the public would elevate the ethical standing of the profession and the general opinion of the regard and function of the pharmacists toward the suffering. Physicians would also appreciate the aid it would be to them as a means of obtaining pharmaceutical articles desired suddenly. It is not noble to treat this matter with a shrug of the shoulder and say it is impossible to get the pharmacists to agree to any improvement upon present methods. The very fact that Sunday closing has succeeded so well in our metropolis is proof that a majority of the prescriptionists stand ready to assist whenever a worthy and unselfish movement is started. What sacrifices are made along the lines indicated work toward the co-operation of medicine and pharmacy in the relief of suffering humanity.

The substitutes for alternating Sunday closing are many, as has already been seen in the references made to them. Personally, I feel that it is better to have all drug stores keep open all day Sunday than to have the safety of the public jeopardized. But if all drug stores are to be closed on Sunday afternoon, the telephone number or address to be used for urgent summons should be left on the closed doors. In large drug stores in districts where no agreement for alternating on Sundays is decided upon, each clerk should take his turn, but a respite on another day should be allowed. I have made no effort to recite the many ways the situation may be met, but have called the attention of the profession to a matter that I think should be given prompt and efficient treatment, so that the highest degree of usefulness to the stricken may be developed. To this end, I wish to conclude by submitting the following resolutions for adoption:8

Whereas, There is a tendency on the part of the retail pharmacists, in their desire to obtain needed rest, to close all drug stores on Sunday afternoon, which custom was unqualifiedly endorsed by the California Pharmaceutical Association at its last annual meeting, and

Whereas, There are many emergencies that occur on Sunday afternoon that could be more simply and, often, more safely handled if the drug stores in every small town and in the several sections of the larger cities arranged to keep one pharmacy. open all day Sunday; therefore, be it

Resolved, That the State Medical Society of California, while not opposed to the propaganda of securing adequate rest for the overworked pharmacist, recommends that alternating Sunday closing of drug stores be established where possible, so as to furnish the sick and injured in every locality with the benefits afforded by a drug store; and be it further

Resolved, That a copy of these resolutions be forwarded to the California Pharmaceutical Association with the request that it take similar action and co-operate in every other way possible in this reform.

References:

- 1. Proceedings C. Ph. A., 1912.
 2. Proceedings C. Ph. A., 1912, or Pacific Pharmacist, May, 1912, or S. F. and Pacific Druggist, xvi, No. 2.
 3. Pacific Pharmacist, July, 1912.
 4. Pharmacraft, April, 1913.
 5. A. S. Musante, Pacific Pharmacist, 1910, iv, 92, or Jour. A. M. A., 1910, Iv, 1082, or Practical Druggist, 1910, xxviii, 124.
 6. "Sunday Closing," Pacific Pharmacist, iii, 479.
 7. Pacific Pharmacist, iv, 112.
 8. These resolutions are practically the same as those unanimously adopted by the San Francisco County Medical Society, May 13, 1913.

ATROPHY OF THE PROSTATE GLAND WITH CITATION OF CASES.*

By HOWARD SOMERS, M. D., San Francisco.

No organ in the human economy, with perhaps the thyroid excepted, is exciting more interest pathologically and surgically than the prostate gland, because in the latter few men of advanced life preserve the normal size and character of this gland. We have studied so attentively the hypertrophied condition that its antithesis-atrophyhas suffered by comparison, and there appears but little literature to recognize, diagnose and treat this condition. Statistics of authors show, however, that the condition has been observed and too without an infrequency. Thompson in his 67 cases, quoted 56 hypertrophied while 11 were atrophied; Messer 35 hypertrophied with 20 atrophied; and Ditiel out of 54 cases, 18 were hypertrophied and 36 atrophied.

In the atrophied condition we find the gland of a white or a grayish white color, hard and resistant, in marked contrast to the normal yellowish, porous, spongy, elastic prostate. The size is smaller than the normal, averaging about 250 grains in weight. The capsule is hard and firm and densely adherent. The sheath and fibrous connective tissue of the perineal outlet in general are more dense and tough, rendering the identification and isolation of the perineal structures more difficult. The surface of the gland is very irregular. The direction of the urethra is distorted, but not much increased in length. Bryan has attempted a classification of the causes of the atrophied condition of the prostate gland, as follows:

- Inflammatory.
- Atrophy of wasting diseases. 2.
- Atrophy caused by pressure. 3.
- 4. Congenital form.
- Senile form. 5.

^{*} Read before the Forty-third Annual Meeting of the Medical Society, State of California, Oakland, April, 1913.

The senile form, which concerns us here, is by far the most common of the atrophied varieties. Thompson says it is the resulting phenomenon of regressive metamorphosis. Senile atrophy like hypertrophy, presents rarely before 50, sometimes before 40. There are instances at 17, 22, 26 and 33. At first the glandular and later the fibromuscular structures become involved. Both sides of the gland are usually affected. Bryan states as etiological factors: (1) pressure of passive congestion, (2) early excessive venery, (3) senile retrogression and arteriosclerosis.

Symptoms. In the lighter cases there are very apt to be no symptoms, but in the more severe a distressing and unrelenting condition prevails leading to profound constitutional symptoms. At the beginning of the progressive state the patient will complain of enuresis, diurnal and nocturnal. The individual evacuations of the bladder are less than normal only more often repeated. Later appear a post-urinal leakage and pain in the perineum radiating along the course of the urethra to the glans penis. The cause of the frequency appears to be not a congestion, as in prostatic hypertrophy, but the initial expression, as Grosglik says, of the disappearance of the governing nerve of the prostate and particularly those ganglion cells lying in the periphery of the organ. At the beginning of the disease there is no change in the urine, but later infection comes in spite of the most rigid precautions to the contrary. The residual urine and dribbling are due to gradual increasing atonic weak internal sphincter. The muscle ring loses its tone due to a gradual disappearance of the glandular elements. Then follow impotence, insufficient erections and non-motile spermatozoa due to absence of prostatic secretion. In some cases the semen regurgitates into the bladder, which seems to prove that in normal cases the regurgitation of the semen is not prevented by the congested caput but to the internal sphincter, caused by a defectiveness in its action. An invasion of bacteria from the outer world sets in, resulting in a severe cystitis. The bladder becomes early incompensatory. The attacks of acute retention with marked and painful onsets of frequent urination gradually increase in severity. The cystoscope will show a chronic cystitis, a diffuse capillary injection, and a velvety-like appearance of the mucous membrane with scattered yellowish spots of desquamation.

An examination of the prostate per rectum finds the organ small, not painful or sensitive, the surface generally irregular and nodular. The normal active resistance offered to the urethral sound is lacking; it falls readily into the bladder, the urethral length is not increased.

The question now arises: How are the clinical symptoms so definite with the unimportant changes in the sphere of the prostate? A question that has for some time drawn the attention of many authors and has been the object of much spirited discussion, especially so by the French authors. Mercier asserts that the bladder insufficiency exists in atrophy as well as in hypertrophy, but that

there is a distinction in the cause in that by hypertrophy the middle lobe plays the role of a valve. while in those cases without enlargement of the gland—atrophy—we have a cross muscle band which passes behind the lip of the urethral opening of the bladder. This is the celebrated valve of Mercier which in the older text-books took an honored place. In spite of its existence it was held by many authors in dispute. This position was maintained, however, until further studies of senile bladder insufficiency under the French school brought about a complete change of idea, Gunyon maintaining that the underlying cause lay in the bladder whose walls had undergone sclerotic changes secondary to a general sclerotic condition. The degenerate bladder wall being the chief cause of the insufficiency, while the prostatic change was only a secondary cause. At the present time the Gunyon theory belongs to history only for one reason at least if for no other and that is that it is now established that after the abnormal prostate is removed the bladder regains its ability to again normally functionate. Ciechanowski thought that the cause of bladder insufficiency with prostatic atrophy lay in the atrophy of the muscles. It is not yet established by some authors whether in atrophied prostate a condition of mechanical obstruction exists at the bladder mouth. In a far reaching and exhaustive report by Englisch, following a train of clinical and anatomical pathological observations, he attempted to prove that the posterior lip of the inner urethral opening is the natural support, that said muscle, existing in the normal, is changed in the atrophied condition to a fibrous band which arose at times to the dignity of a middle lobe, producing thereby a valve-like aperture which prevented the free out-flow of urine. It is claimed, however, that Englisch had in mind the young individual with the congenital atrophied prostate and not the acquired atrophied gland of the old.

Fuller, Chetwood, Keyes and later Cholzoff maintained that in their experience a chronic contraction of the neck of the bladder, principally found in the young, was the cause of bladder insufficiency without an incorporation of the prostate.

Albarran and others of the French school, in their discussion at the First International Urological Congress in 1908 over urine retention without mechanical obstruction, showed a group of cases in which a change in the bladder existed but failed to make clear why such conditions existed but mentioned that a possible cause was a contraction of the bladder neck brought about by reflex inhibition (vesicle). As to the starting point of the reflex and the method and manner of its contractility of the bladder, nothing definite was elicited. Nevertheless, they cautioned against the removal of a not enlarged prostate because the operation brought about no improvement of the functional ability of the bladder.

These facts standing out as they do, present only a grievous deficiency of a knowledge of the pathologic condition and therapy of bladder insufficiency without prostatic hypertrophy.

Treatment. Beyan advocates, in the early stage, a methodical and general insertion of a large urethral sound to combat the weakened sphincter which he claims exercises a very favorable influence, if early instituted, upon the very annoying urinary frequency. Such conditions as posterior urethritis, strictures, vesical and prostatic calculi, tumors and cysts must be treated.

One finds in the literature small notes that some surgeons, as Legner, Dilbet some time after removal of small glands of 10, 15-20 gms. weight have obtained good results. Bartrima, indeed, at the First International Congress of Urology, showed a successful extirpation of an 8 gm. prostate. Shall we, then, as Albarran suggested, do nothing and permit the patient to live a life of intolerable suffering? It would seem, if the conditions are favorable, an operation to remove the obstruction should be done.

The suprapubic, perineal and Bottini are the operations of choice. Bottini's operation is now seldom employed, as it has not fulfilled the hopes anticipated. The results are not permanent, not only when employed in the hypertrophied condition but also in the very slight pathological changes in the bladder.

Glosglik favors the Freyer operation, the suprapubic route, claiming as he does an easy road to the bladder neck and enabling all pathological changes of the inner urethral opening to be seen and removed, but admits the technic is definitely more difficult than in the removal of the hypertrophied gland. He discredits the perineal route and as far as efficiency is concerned puts it in the same class as the Bottini operation. Young of Baltimore claims that just in this atrophied condition is his operation for the removal of the gland most applicable, and his method is the one we have employed with good results.

In our work of 26 cases of bladder insufficiency of the last year, 19 were due to hypertrophy and the balance, 7, due to atrophy. The report of three of the latter will suffice to show the conditions that, in a general way, existed in the entire seven.

Case i, J.H., 72. Complained of frequency of urination, arising on an average of 12 times nightly to pass his water. This condition began about three years previously and has been gradually getting worse until his condition was most distressing. Pain, tenesmus and, as stated, the great frequency of urination.

Examination per rectum revealed a small nodular not oversensitive prostate. The prostate seemed about the size of a hazel nut and approached to some extent a stony hardness. Cystoscopic examination showed a rather small unevenly outlined prostate with no appearance of hypertrophy. A considerable degree of trabeculation extending well over the entire bladder wall. Residual urine 4 oz. After a month of palliative treatment, with no improvement, an operation was performed.

Under spinal anesthesia and following the Young technic for prostatectomy, the gland was removed. Its removal proved long and tedious, due to the hard fibrous nature of the gland. The patient had absolutely no shock. With the retaining catheter in the fistulous opening for drainage, the patient was put to bed with orders for giving internally urotropin and the washing of the bladder every two

or three hours with a warm solution of boric acid. The drain was removed the second day. The patient was up and walking about the third day, and the perineal wound closed on the 17th day. There were absolutely no complications at any time such as hemorrhage or vomiting from nausea.

The patient's condition at the present time he claims is much improved. From arising 12 times nightly, he arises now two to three times, and his residual urine has decreased to about two ounces.

Case ii, J. W., 68. Laborer. Complained of frequent urination—four to five times during the night and every hour during the day. Began to arise at night to pass his water three years previously and this condition has gradually grown worse, until symptoms such as a weak, small stream, pain at beginning and end of urination, urgency and delay in starting the stream. The patient's general condition appeared fairly good. The kidneys not condition appeared fairly good. The kidneys not tender or palpable. The urine full of pus and broken down epithelial cells and mucous. No al-bumen, no sugar, no casts. Bladder capacity eight ounces. Residual urine three ounces. The patient's condition in spite of some six months' palliative treatment, such as washing the bladder and repeated stretchings by hydraulic pressure, passing of sounds, continues about the same. The examination per rectum indicated that both lobes were hard, smooth and hazel nut in size. The cystoscope showed a high degree of trabeculation, numerous and deep trabeculae and diverticulae, deep redness of the bladder mucous membrane and, further, no appearance of hypertrophy at the inner urethral opening.

As stated above, no apparent improvement detected, an operation was suggested which the patient readily agreed to. Identically the same technic as described in above case was carried out. The gland was removed. It weighed not over 10 gms. No bleeding or other complications. Patient up and about in a few days. His fistula closed in 25 days. It is now nearly one year since the operation. Patient says his bladder gives him no trouble and he arises but once at night to pass his urine.

This case is remarkable from the fact that without any apparent mechanical obstruction at the inner urethral opening there should be such a pathological change in the condition of the bladder walls.

Case iii, G. T., 46. Porter. Came complaining of intense burning and frequency of urination of about 12 years' standing. Family history is good. Has always been well and strong until his venereal history began. He has had gonorrhea many times, involving the posterior urethra. Many series of chancroids and patient thinks "some of these must have been chancres."

Twelve years ago the patient began arising at night five and six times and during the day every three-quarters to an hour. This condition had continued all these years in spite of many and varied forms of treatment. He had the characteristic symptoms such as pain, burning and tenesmus on urination, great urgency, a general feeling of ill-being. His general appearance seemed excellent, full, healthy and robust looking. No pain in kidney region—not palpable or sensitive. Urine—no casts, no albumen. but full of pus cells, mucous and epithelial cells.

An examination of prostate showed a prostate hard, nodular, borders sharp and well defined, not particularly sensitive. The cystoscope showed a prostate whose lines were uneven, somewhat simulating the broken teeth of an old saw, a considerable degree of trabeculation and no diverticulae. The trigone was quite heavily injected. The urethral openings normal.

After several months of sounds, bladder washings, dilatations of the bladder and instillation at the neck of the bladder, an operation was advised.

The Young technic followed as above. The

post-operative treatment also as above was carried out. The third day a slight hemorrhage from the wound took place. A thorough washing of the bladder with boric acid solution and a repacking of the wound brought a complete stop to this much troubled condition complained of by various authors.

The patient continued to improve, was up and about on the fourth day. It is now almost one year since the operation, the patient says he feels fine, arises but once at night to pass his water, and only four times during the day. The urgency, pain, tenasmus has left him entirely. His sexual power, so he claims, is fine.

Conclusions.

- 1. The clinical features of bladder insufficiency are very little distinguished between atrophy and hypertrophy.
- 2. The cause of the bladder disturbance due to atrophy is not clear, some authors believe it is an anatomical change in the bladder wall, an arteriosclerotic degeneration after Guyon; an atrophy of the bladder muscle after Ciechanowski, while others maintain that the cause of the insufficiency rests in the change in the bladder opening whereby the role of a mechanical obstruction is played, a valve at the inner urethral opening after Englisch. Fullers, Chetwood, Keyes, Cholzoff believe the condition is due to a chronic contraction at the neck of the bladder; and finally, such authors as Albarron, Janet and Bazy attribute the cause of the insufficiency to a contraction of the neck arising reflexly.
- 3. The symptoms of mechanical obstruction due to atrophy cannot be distinguished from those of a mechanical obstruction due to hypertrophy.
- 4. The anatomical standpoints are, nevertheless, of both conditions atrophy and hypertrophy of the prostate entirely different. The hypertrophied gland is easily enucleated. There is a deviation of the urethra and a baring of the bladder opening which hinders the free outflow of urine. In the atrophied gland the adenomatous condition is wholly wanting. The obstruction to the bladder opening comes probably following atrophy of gland canals when a change in the proportion of the gland tissue and stroma take place.
- 5. The treatment of the bladder insufficiency due to prostatic atrophy should be a radical removal of the diseased tissue surrounding the inner opening of the bladder. The operation for the removal of the atrophied gland either by the suprapubic or the perineal route is much more difficult than the hypertrophied gland due to the fact that in the former there is no adenomatous tissue and the hold on the surrounding tissue extremely firm.

TRAUMATIC HYSTERIA.*

By JAMES T. FISHER, M. D., Los Angeles.

This paper consists of an analysis of thirty cases of so-called traumatic hysteria, which have come under our personal observation in recent years. Rather than report each case in detail, we will discuss only some of the dominant symptoms, the

majority of which were found in all the cases wherein paralysis occurred. One-third of the series showed no paralysis.

No attempt will be made to enter into a long disquisition relative to hysteria in general except the symptoms which are herein referred to.

As we all know hysteria in major or minor form is relatively common and often masquerades under one heading or another, imitating, as it often does, organic disease. We have often had occasion to change the diagnosis of a sprain, even a broken back, to plain hysteria. We sometimes see an extremity bandaged and splinted which only makes the psychosis worse, and in no small degree intensifies the existing hysteria.

For many years e have felt that the terms traumatic hysteria and traumatic neurosis are incorrect appellations and should be entirely discarded. They do not stand for any disease entity. We all know that a hysteria may follow a traumatism, but even so, it differs in no respect from the same disorder due to other causes.

We do not believe, as has been advocated by Babinski, that the disorder is due to suggestion. The practical question in relation to these cases is, how soon after traumatism did they develop? If immediate, it is almost certain that they existed before, and a thorough study of the antecedents of the individual will often reveal such data. Some of our cases were not typically pure hysteria but were mixed in varying proportions with neurasthenia and one indeed showed a bit of malingering.

Hysteria, traumatic or otherwise, always has certain definite earmarks known as stigmata. We are fully of the opinion, especially in traumatic cases, that no stigmata, no hysteria. With regard to these stigmata without doubt the limitation of the visual field through which the patient sees as through a keyhole, may be regarded as the most important of the different stigmata to which we will allude, and was found in 25 cases in this series. Next, we may regard a lessening or diminution in tactile sensibility on one side of the body, very often the left side, which we speak of as hemi-anesthesia. There is absolutely no possible organic cause for this condition, except in rare cases from lesions in the posterior part of the internal capsule, and if such lesion did exist we would have a very different group of symptoms.

The next most important sign in our experience is a mono-plegia affecting one leg or one arm often on the left side. Over this paralyzed area we invariably found sensory disturbances which were not noticed by the patient until his attention was called to it-which was a loss of sensation over the entire part paralyzed to where the member joined the body. In three of our series this disturbance of sensation was to touch, temperature, and pain. In other cases it was merely a loss of sensation to touch. As we all know, this does not correspond to any definite nervous distribution and was, as is sometimes seen in alcoholic neuritis, a stocking or glove termination. In thirteen of this series the symptom known as globus was quite evident, this meaning that the pharyngeal wall partakes of the same degree of anesthesia which is

^{*} Read before the Forty-third Annual Meeting of the Medical Society, State of California. Oakland, April, 1913.